Infectious Disease - EBOLA– Background Information

The likelihood of contracting Ebola is extremely low unless one has direct unprotected contact with the body fluids of a person (like urine, saliva, feces, vomit, sweat, and semen) or direct handling of bats, rodents, or nonhuman primates from areas with Ebola outbreaks. Emergency medical services (EMS) personnel, along with other emergency services staff, have a vital role in responding to requests for help, triaging patients, and providing emergency pre-arrival instructions and treatment to patients. Coordination among 9-1-1 Public Safety Answering Points (PSAPs), the EMS system including Emergency Medical Dispatchers, healthcare facilities, and the public health system is important when responding to patients with suspected Ebola exposure.

Role of the Communication Centers, Dispatchers/call-receivers

Initial signs and symptoms of Ebola include fever, muscle or abdominal pain, headache. Diarrhea, nausea, vomiting, and internal and/or external bleeding may occur later. Other symptoms such as chest pain, shortness of breath, or confusion, may also develop. Symptoms may become increasingly severe and may include jaundice (yellow skin), severe weight loss, confusion, bleeding inside and outside the body, shock, and multi-organ failure.

Ebola is an often-fatal disease and should be considered in anyone with fever who has had contact with an Ebola patient, or lived in/ travelled to an area where Ebola is present (currently countries in West Africa include Sierra Leone, Guinea, and Liberia).

Communication centers (call-receivers and dispatchers) serve an important function in every phase of EMS incident management, especially those involving infectious disease pathogens such as Ebola. They identify the presence of an infectious environment, determine resources required, initiate responses, advise responding units of prevailing conditions and provide pre-arrival instructions for patient care as well as limiting exposure. In addition, they may identify specific clusters of illness based on symptoms and geographic locations, which will serve as an important "Epidemiology-link" to Public Health and responder agencies.

Operations

Remember, this is a dynamic situation – one that DPHHS has chosen to stay in front of – making plans for any foreseen issues or circumstances. However, one thing we are certain of is the need to **eliminate preventable errors** and it appears that **good communication protocols**, **adherence to isolation and quarantine procedures** (included in pre-arrival instructions) and **notification to hospitals and public health** (for purposes of tracking possible exposures) are key no matter what stage of this event we might encounter.

Communications personnel must be trained and required to seek information from callers as well as transmit that information to responders which indicates the presence of an infectious disease or a potentially infectious condition. In addition to the usual EMS questions, when an infectious disease is either suspected or reported, the dispatcher/call-receiver should ask questions specifically developed to identify possible risk, exposure or infection.

Infectious Disease - EBOLA– Guidelines, Pre-Arrival Instructions and Short Report:

1) Patient Assessment:
- Does the patient have a fever?
- Does the patient have abdominal pain, headache, muscle pain or diarrhea? Is he/she vomiting or have unexplained bleeding?

If yes to either of these questions:

2) Has the patient traveled or been in contact with anyone else that has traveled to West Africa (or any other affected area) in the last 30 days?

If both criteria are met, send the appropriate response. (see below)

If there has been no travel or possible exposure to anyone that has traveled to West Africa (or any other affected area) in the last 30 days, then triage call per normal daily operations using chief complaints or CBD Guidelines.

Is anyone else is the house sick? If so, what are their signs/symptoms? Be alert for multiple patients with the same complaints, signs and symptoms.

If no fever or other symptoms, triage the call per normal daily operations using chief complaints or CBD Guidelines.

Appropriate response:
BLS should be sent for patients reporting non-critical symptoms (stable patients).
ALS should be sent for those patients reporting critical symptoms (unstable patients) such as:

- Circulatory system – sign of shock – unable to sit/standing without passing out
- Respiratory system – work of breathing – unable to speak normally, tripod position or audible wheezing or stridor
- Nervous system – Unconscious or unresponsive to verbal or touch
- Chest pain over 40 years of age
- Call from a medical facility – Clinic, Residential Care Facility with BP < 90, O2 < 90 etc.

Short reports to responding units MUST include information on signs/symptoms of infectious disease and the term <u>"PPE (personal protective equipment) advised</u>"
- Include the signs/symptoms and recent travel information.
"Medic 7 you're responding to a 45 YOF with fever, weakness and recent travel to (insert location)-PPE ADVISED"

Pre-arrival instructions must include directions to provide scene security, limit number of individuals exposed and reduce the infection risk along with any medical pre-arrival instructions:

- Caller to remain on location
- Avoid contact/exposure to other people
- Any other pre-arrival instruction associated with their specific medical signs/symptoms

If using CBD Guidelines, these Chief Complaint Cards could contain signs/symptoms related to this infectious disease:
1 – Abdominal pain
3 – Infectious Disease
4 – Bleeding
5 – Breathing Difficulty
7 – Chest Discomfort
12 – Head/Neck
17 – Sick
19 – Unconscious/Syncope

PD Requests for Aid response for possible Infectious Disease patient:
Police officers may request aid for a patient they have encountered during a police event. They may use language such as "requesting medical aid for patient – PPE response". Or they may convey the need for isolation or quarantine. They may use other language as well but the key is to make sure the responding EMS and/or additional responding units are aware of the need to use PPE.

Other Considerations:

In addition, if hospital resources are limited due to infectious disease crisis, communication centers should monitor daily hospital status in the region, including hospitals on divert of closed and the designation of any infections disease receiving facilities including public health alternate care sites.

Be aware that at some point as part of a surveillance and tracking program, Public Health Epidemiology may ask for ongoing reports regarding number of known or suspected infectious disease patients and responses dispatch has identified. If that occurs, someone may need to be designated to run the aggregate numbers for the use of card 3 – Infectious Disease as well as reporting from EMS response agencies/fire departments.

Infectious Disease – Ebola – Screening Decision Tree